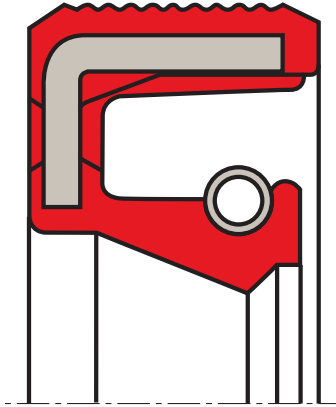


oil seal R72-V

seal spec



description

rotary shaft seal with a grooved elastomer outer sheath which fully encases a metal insert as well as a spring-energised sealing lip. in addition, the R73-V model with a protective lip on the air side is available.

application



category of profile

molded/standard/trade product or machined with minor design change.

single acting rotary shaft seal

area of application

sealing of rotating machine elements such as shafts, hubs and axles

- transmission systems (e.g. gearboxes)
- pumps
- electrical motors
- machinery industry (e.g. tool machines)

advantages

- good static sealing
- compensation of different thermal expansion
- reduced risk of fretting corrosion
- up to 0.5 MPa pressure at moderate peripheral speed
- low lip and shaft wear at low pressure run
- effective protection against air side contaminants
- no need of back-up ring

function

the R72-V/R73-V is a rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (R73-V) on the side facing away from the medium, against dirt accumulation from the outside. the grooved outer sheath provides improved static sealing for housings with greater thermal expansion because it has a higher degree of press fitting. it also prevents permanent skew of the rotary shaft seal. in addition, installation is facilitated because less press-fit force is required.

media

mineral oil and greases, synthetic oils and greases, engine, gear and ATF oils, fuels, aromatic and chlorinated hydrocarbons, broad chemicals and solvents resistance.

**operating parameters & material**

sealing element*	material		temperature	max. surface speed	max. pressure
	metal insert**	spring**			
s-mart FKM (75 shore A & 80 shore A)	'non-alloy steel DIN EN 10139	rust & acid-resistant steel DIN EN 1.4571 (AISI 304)	-40 °C ... +100 °C	30 m/s	0,5 bar (0,05 MPa)

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously.

surface speed limits apply only to the presence of adequate lubrication film.

* special grades and other materials (ACM, EACM, EPDM, HNBR, MVQ) on request

** metal insert, and spring as well, can be supplied in different materials on request.

surface quality

surface roughness	Rtmax [μm]	Rz [μm]	Ra [μm]
shaft	≤6,3	≤1,0-5,0	≤0,2-0,8
bottom of groove	≤25	≤10-25	≤1,6-6,3

hardness 45 ... 60 HRC

tolerance recommendation

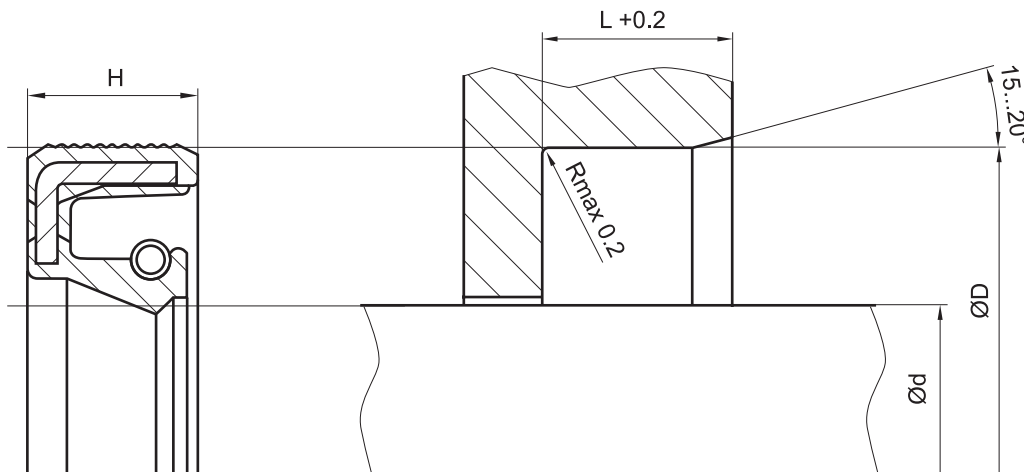
seal housing tolerances	
Ød	f8/h11
ØD	H8

fitting & installation

suitable tool should be used for installation. it is recommended that the installation housing is designed to provide the rotary shaft seal with axial support.

seal & housing recommendations

please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...



don't hesitate to contact our technical department for further information or for special requirements (temperature, speed etc.), so that suitable materials and/or designs can be recommended.